

OPEN MEETING AGENDA ITEM



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BEFORE THE ARIZONA CORPORATION COMMISSION

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BOB STUMP, Chairman  
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AZ CORP COMMISSION  
DOCKET CONTROL

ORIGINAL

IN THE MATTER OF THE APPLICATION OF  
CHAPARRAL CITY WATER COMPANY FOR A  
DETERMINATION OF THE CURRENT FAIR  
VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASE IN ITS  
RATES AND CHARGES BASED THEREON.

DOCKET NO. W-02113A-13-0118

DECISION NO. 74568

NOTICE OF COMPLIANCE FILING

In compliance with Decision No. 74568, Chaparral City Water Company, hereby files the  
attached Plan of Administration for the System Improvement Benefits Surcharge Mechanism as  
a compliance item in this docket.

RESPECTFULLY SUBMITTED on July 21, 2014.

*Sandra L. Murrey*

Sandra L. Murrey  
Rate Analyst  
EPCOR Water Arizona, Inc.  
2355 W. Pinnacle Peak Rd, Suite 300  
Phoenix, AZ 85027

Original and 13 copies filed  
on July 21, 2014, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Copies of the foregoing emailed  
on July 21, 2014 to:

Brian K. Bozzo  
Compliance and Enforcement Manager  
Utilities Division  
1200 West Washington Street  
Phoenix, AZ 85007

Arizona Corporation Commission

DOCKETED

JUL 21 2014

DOCKETED BY

*[Signature]*

1 implement a System Improvement Benefit surcharge mechanism pursuant to the requirements and  
2 conditions set forth in Exhibit B.

3 IT IS FURTHER ORDERED that Chaparral City Water Company shall file with Docket  
4 Control within 30 days, as a compliance item in this docket, a Plan of Administration for the System  
5 Improvement Benefit surcharge mechanism consistent with that appearing in Exhibit B for  
6 Commission review and approval.

7 IT IS FURTHER ORDERED that Chaparral City Water Company is hereby authorized to  
8 request, pursuant to the requirements and conditions set forth in the Plan of Administration appearing  
9 in Exhibit B, System Improvement Benefit mechanism treatment only for the specific projects listed  
10 in SIB Table I of Exhibit B.

11 IT IS FURTHER ORDERED that Chaparral City Water Company shall continue using its  
12 existing depreciation rates, which are set forth in Hearing Exhibit S-6, Exhibit KS at Table A, except  
13 for the depreciation rates for the Transportation Equipment Account and the Pumping Account which  
14 shall be as proposed by Chaparral City Water Company.

15 IT IS FURTHER ORDERED that Chaparral City Water Company shall file a depreciation  
16 study in its next rate case to support any depreciation rates that do not align with Staff's standard  
17 rates.

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## EXHIBITS

SIB PLANT TABLE I .....	Exhibit 1
SIB PLANT TABLE II <sup>2</sup> .....	Exhibit 2
SIB SCHEDULE A - CALCULATION OF OVERALL SIB REVENUE REQUIREMENTS AND EFFICIENCY CREDIT .....	Exhibit 3
SIB SCHEDULE B - CALCULATION OF SIB TRUE-UP REVENUE REQUIREMENTS ADJUSTMENT .....	Exhibit 4
SIB SCHEDULE C - TYPICAL BILLS ANALYSIS .....	Exhibit 5
SIB SCHEDULE D - SUMMARY OF REVENUE AND RATE BASE IMPACTS INCLUDING EARNINGS TEST .....	Exhibit 6

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<sup>1</sup> Revised 4-1-2014

<sup>2</sup> Revised 4-1-2014

## I. GENERAL DESCRIPTION

This document is the Plan of Administration ("POA") for the System Improvement Benefits ("SIB") Mechanism approved for Chaparral City Water Company ("CCWC" or "Company") by the Arizona Corporation Commission ("ACC" or "Commission") in Decision No. 74568 on June 20, 2014. The SIB provides for recovery of the capital costs (return on investment, income taxes and depreciation expense) associated with distribution system improvement projects listed in SIB Plant Table I that have been verified to be completed,<sup>3</sup> net of associated retirements and placed in service per SIB Plant Table II and where costs have not been included in rate base for recovery in Decision No. 74568. Any expenditures offset by contributions in aid of construction or advances in aid of construction are not eligible for inclusion in the SIB.

## II. DEFINITIONS

- NARUC – National Association of Regulatory Utility Commissioners
- SIB – System Improvement Benefit mechanism to be implemented between rate proceedings to support investment in plant recorded in SIB Eligible NARUC accounts.
- SIB Eligible Plant – Investments in plant recorded in SIB Eligible NARUC accounts.
- SIB Eligible NARUC accounts:
  - NARUC Account No. 309 – Supply Mains
  - NARUC Account No. 331 – Transmission and Distribution Mains
  - NARUC Account No. 333 – Services
  - NARUC Account No. 334 - Meters and Meter Installations;
  - NARUC Account No. 335 – Hydrants
- SIB Plant Table I (Excerpt attached as Exhibit 1)<sup>4</sup> – The schedule of planned SIB eligible projects that is either approved in the Company's most recent rate case or updated by a subsequent Commission decision. As used herein, this term refers to

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<sup>3</sup> Acceptable form of verifications may include the Maricopa County Environmental Services Department Approval of Construction, Professional Engineer's Certificate of Completion, etc.

<sup>4</sup> See Company filing of August 22, 2013

the most recently updated SIB Plant Table I available unless reference is made to a particular Commission decision.

- SIB Plant Table II – The schedule of completed and verified SIB eligible projects from the latest Commission approved SIB Plant Table I and associated retirements.
- Total Revenue Requirement – The revenue requirement approved in Decision No. 74568, plus the SIB Revenue Requirement.
- SIB Revenue Requirement – The revenue requirement equal to the return on investment, income taxes and depreciation expense necessary to support the SIB Plant Table II amounts.
- SIB Revenue Requirement Efficiency Credit – An amount equal to 5 percent of the SIB Revenue Requirement.
- SIB Authorized Revenue – Amount equal to the SIB Revenue Requirement less the SIB Revenue Requirement Efficiency Credit plus any SIB True up Adjustment.
- Gross SIB Surcharge – Amount to be shown on customers' bills based on meter sizes without consideration to the SIB Surcharge Efficiency Credit.
- SIB Surcharge Efficiency Credit – An amount equal to 5 percent of the Gross SIB Surcharge to be shown on customers' bills.
- SIB Surcharge – The amount equal to the Gross SIB Surcharge less the SIB Surcharge Efficiency Credit to be charged based on meter size, calculated to recover the SIB Authorized Revenue, to be shown on the customers' bills.
- SIB True-up Adjustment – An amount to adjust for over- or under-collection of the SIB Authorized Revenues as compared with the total SIB Surcharges collected for the preceding 12 month period. Each true-up shall also analyze the cumulative over- or under-collections to include a comparison of all past SIB Authorized Revenues, total SIB Surcharge collections, and prior true-ups to be used in calculation of the SIB true-up surcharge or credit.

### III. SIB RELATED FILINGS

- A. Progress Reports – Once a SIB is approved in a decision, the Company must file with Docket Control semi-annual status reports delineating the status of all SIB Eligible Plant, on a project by project basis as listed in the latest Commission approved SIB Plant Table I. The initial semi-annual status report shall include

only those projects from the initial SIB Plant Table I which the Company has designated as most likely to be completed in the first 12 months.

- B. Reconciliation and True Up – Once a SIB Surcharge is implemented, the Company must file annually to true up its SIB Surcharge collections over the preceding twelve months with the SIB Authorized Revenue for that period and establish a surcharge or credit to true up over or under collections, regardless of whether it seeks a new surcharge. The filing dates for these annual true-ups shall be as established in the Commission's Decision approving the SIB Surcharge.
- C. SIB Surcharge Requests – To obtain its SIB Surcharge the Company must file the following:
  - 1. SIB Plant Table II (with supporting information and documentation), showing the SIB eligible projects completed for which the Company seeks cost recovery. Such projects must:
    - a. be projects listed in the SIB Plant Table I;
    - b. have been completed by the Company;
    - c. have been verified; and
    - d. be actually serving customers.
  - 2. A summary of Commission approved SIB-eligible projects contemplated for the next twelve (12)-month SIB surcharge period from SIB Plant Table I<sup>5</sup> from Decision No. 74568 to allow the Commission to establish the latest SIB Plant Table I.
  - 3. SIB Schedule A (sample attached as Exhibit 3), showing a calculation of the SIB Revenue Requirement and SIB Revenue Requirement Efficiency Credit, SIB Authorized Revenue, Gross SIB Surcharge, SIB Surcharge Efficiency Credit, and the SIB Surcharge. Schedule A shall be supported by revenue requirements schedules supporting the revenue requirements in Decision No. 74568 and the pro-forma revenue requirements including the effects of SIB Eligible Plant.

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<sup>5</sup> Beginning with its SIB Surcharge Request filing for Year Two, the Company may request a change from the estimated Cost/Unit (approved in the Company's most recent rate case Decision) due to inflation using the latest calendar year Consumer Price Index (see sample SIB Plant Table I revised 4-1-2014). This may be done only if the original SIB Plant Table I unit cost did not account for inflation.

4. Schedule B (sample attached as Exhibit 4) showing the overall SIB True-up Adjustment calculation for the prior twelve-month SIB Surcharge period, as well as the individual SIB True-up Adjustment for each meter size.
5. SIB Schedule C (sample attached as Exhibit 5) showing the effect of the SIB Surcharge on a typical residential customer bill for both median and average usage.
6. SIB Schedule D (sample attached as Exhibit 6) which shall include an analysis of the impact of the SIB Eligible Plant on the fair value rate base, revenue, and the fair value rate of return. The Company shall also file the following:
  - a. the most current balance sheet at the time of the filing;
  - b. the most current income statement;
  - c. an earnings test schedule;
  - d. a rate review schedule (including the incremental and pro forma effects of the proposed increase);
  - e. an adjusted rate base schedule; and
  - f. a Construction Work in Progress ledger (for each project showing accumulation of charges by month and paid vendor invoices).
- D. The Company will maintain and provide Excel schedules with formulae intact supporting the revenue requirements approved in the rate decision that approved the SIB and provide same Excel schedules to incorporate the effects of SIB Eligible Plant for the current SIB Surcharge Request and any previously approved Surcharge and True-up requests.
- E. The Company may make its initial SIB Surcharge Request through Docket Control no earlier than twelve months after the entry of Decision No.74568.
- F. The Company may make no more than one SIB Surcharge Request every twelve months with no more than five SIB Surcharge Requests between rate case decisions. A True-up must be filed with each Surcharge Request, except the first.
- G. Unless otherwise authorized by the Commission, the Company shall be required to file its next general rate case no later than June 30, 2018, with a test year ending no later than December 31, 2017.

- H. Any SIB Surcharges that are in effect shall be reset to zero upon the date new rates become effective in the Company's next general rate case.

#### IV. SURCHARGE CALCULATIONS

A. Calculations of Amounts to Be Collected By the SIB Surcharge

1. The amount to be collected by the SIB Authorized Revenue shall be equal to the SIB Revenue Requirement minus the SIB Revenue Requirements Efficiency Credit plus any SIB True up Adjustment.  
For purposes of calculating the SIB Revenue Requirement:
  - a. The required rate of return is equal to the overall rate of return authorized in Decision No. 74568.
  - b. The gross revenue conversion factor/tax multiplier is equal to the gross revenue conversion factor/tax multiplier approved in Decision No. 74568; and
  - c. The applicable depreciation rate(s) is equal to the depreciation rate(s) approved in Decision No. 74568.
2. The SIB plant unit cost to be used in calculating the SIB Revenue Requirement shall be the lesser of the installed SIB plant unit cost listed in SIB Plant Table II or 110 percent of the SIB plant estimated unit cost listed in the latest Commission approved SIB Plant Table I.
3. The amount to be collected by each SIB Surcharge Request shall be capped annually at five percent of the revenue requirement authorized in Decision No. 74568.

B. Reconciliation And True-Ups

1. The revenue collected by the total SIB Surcharges over the preceding twelve months shall be trued-up and reconciled with the SIB Authorized Revenue for that period.
2. A new SIB Surcharge shall be combined with an existing SIB Surcharge such that a single SIB surcharge and SIB Efficiency Credit are shown on a customer's bill.
3. For each twelve (12) month period that a SIB surcharge is in effect, the Company shall reconcile the amounts collected by the SIB Surcharge with



the SIB Authorized Revenue, for that twelve (12)-month period, consistent with Schedule B, attached hereto as Exhibit B.

4. Any under- or over-collected SIB Authorized Revenues shall be recovered or refunded, without interest, over a twelve-month period by means of a SIB True-up Surcharge or Credit.
5. Starting with the second annual SIB Surcharge, where there are over- or under-collected balances, such over- or under-collected balances shall be carried over to the next year, and considered in the calculation of the new SIB True-up Surcharge or Credit. If, after the five-year period there remains an over- or under-collected balance, such balance shall be reset to zero, and addressed in the next rate case.

C. Earnings Test

1. Once a SIB Surcharge is in effect, the Company shall be required to perform an annual earnings test calculation for each SIB Surcharge Request to determine whether the actual rate of return reflected by the operating income for the affected system or division for the relevant 12-month period exceeded the most recently authorized fair value rate of return for the affected system or division.
2. The earnings test shall be:
  - a. based on the most recent available operating income,
  - b. adjusted for any operating revenue and expense adjustments adopted in the most recent general rate case; and
  - c. based on the rate base adopted in the most recent general rate case, updated to recognize changes in plant, accumulated depreciation, contributions in aid of construction, advances in aid of construction, and accumulated deferred income taxes through the most recent available financial statement (quarterly or longer).

**V. ADDING PROJECTS TO SIB TABLE I UNDER EMERGENCY CIRCUMSTANCES**

- A. The Company may seek Commission approval to add projects in SIB Plant Table I only in the event of emergency circumstances. No such changes may be made without Commission approval.

- B. Any addition to SIB Plant Table I must be plant investment that maintains or improves existing customer service, system reliability, integrity and safety. Eligible plant additions are limited to plant replacement projects. The costs of extending facilities or capacity to serve new customers are not recoverable through the SIB mechanism.
- C. To be eligible for SIB treatment, a project must be SIB Eligible Plant.
- D. SIB Eligible Plant must satisfy at least one of the following criteria:
  - 1. Water loss for the system exceeds ten (10) percent, as calculated by the following formula:  $((\text{Volume of Water Produced and/ or Purchased}) - (\text{Volume of Water Sold} + \text{Volume of Water Put to Beneficial Use}))$  divided by  $(\text{Volume of Water Produced and/or Purchased})$ . If the Volume of Water Put to Beneficial Use is not metered, it shall be established in a reliable, verifiable manner.
  - 2. Plant assets that have remained in service beyond their useful service lives (based on the Company's system's authorized utility plant depreciation rates) and are in need of replacement due to being worn out or in a deteriorating condition through no fault of the Company;
  - 3. Any other engineering, operational or financial justification supporting the need for a plant asset replacement, other than the Company's negligence or improper maintenance, including, but not limited to:
    - a. A documented increasing level of repairs to, or failures of, a plant asset justifying its replacement prior to reaching the end of its useful service life (e.g. black poly pipe);
    - b. Assets that are required to be moved, replaced or abandoned by a governmental agency or political subdivision if the Company can show that it has made a good faith effort to seek reimbursement for all or part of the costs incurred.

## VI. RATE DESIGN

- A. The SIB Surcharge rate design shall be calculated as follows:
  - 1. The SIB Surcharge shall be a fixed monthly surcharge containing a Gross SIB Surcharge and the SIB Surcharge Efficiency Credit as its two components.

2. The SIB Surcharge shall be calculated by dividing the SIB Authorized Revenue by the number of equivalent active 5/8-inch meters at the end of the most recent twelve (12) month period, and shall increase with meter size based on the following meter capacity multipliers:

5/8-inch x 3/4-inch	1.0 times
3/4-inch	1.5 times
1-inch	2.5 times
1½-inch	5 times
2-inch	8 times
3-inch	16 times
4-inch	25 times
6-inch	50 times
8-inch	80 times
10-inch & above	115 times

- B. The SIB Surcharge shall apply to all of the Company's metered customers, including private fire service customers.

## VII. SURCHARGE IMPLEMENTATION

- A. SIB surcharges shall not become effective until approved by the Commission.
- B. At least 30 days prior to the SIB surcharge becoming effective, the Company shall provide public notice in the form of a billing insert or customer letter in a form acceptable to Staff. Such notice shall include at least the following information:
  1. The individual Gross SIB Surcharge, by meter size;
  2. The individual SIB Surcharge Efficiency Credit, by meter size;
  3. SIB Surcharge, by meter size; and
  4. Directions where the customer may obtain a summary of the projects included in the current SIB Surcharge Request, including a description of each project and its cost.

# **SIB Table I**

**(Exhibit CC-2)**

**EPCOR Water (USA) Inc.**

**Chaparral City Water Company/Fountain Hills**

**PWS ID No. 07-017**

**August 21, 2013**

## SIB PLANT TABLE I, 1-1

## 2014 Service Line Replacements

## Information to be included with SIB-Eligible Project Notification

Attachment to DSIC-eligible plant											
Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-1	309 Supply Mains									Replace 40 residential services (3/4" or 1" on Ocotillo between Mustang and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 40 years ago, in 1974. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-1 in Exhibit CC-1 for the locations of the replacements.	
	331 T&D Mains										
	333 Services										
S-2	334 Meters									Replace 105 residential services (3/4" or 1" on Mustang between Palisades and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-2 in Exhibit CC-1 for the locations of the replacements.	
	335 Hydrants										

S-3	333	service lines	13	3/4" & 1"	Copper	\$3,881	Spotted Horse	12/2014	n/a	\$50,450	Replace 13 residential services (3/4" or 1") on Spotted Horse between Mustang and Westridge. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 35 years ago, in 1979. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-3 in Exhibit CC-1 for the locations of the replacements.
S-4	333	service lines	37	3/4" & 1"	Copper	\$3,881	Buffalo	12/2014	n/a	\$143,590	Replace 37 residential services (3/4" or 1") on Buffalo between Mustang and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-4 in Exhibit CC-1 for the locations of the replacements.
S-5	333	service lines	9	3/4" & 1"	Copper	\$3,881	Garland	12/2014	n/a	\$34,927	Replace 9 residential services (3/4" or 1") on Garland between Buffalo and Palatka. The services are branched black poly lines (one service for two customers) that are failing at a high rate. The services are located on a short dead-end street off of Buffalo, which is scheduled for service line replacements in the same year (project S-4). Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-5 in Exhibit CC-1 for the locations of the replacements.
S-6	333	service lines	43	3/4" & 1"	Copper	\$3,881	Pinto	12/2014	n/a	\$166,874	Replace 43 residential services (3/4" or 1") on Pinto between Palomino and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-6 in Exhibit CC-1 for the locations of the replacements.
Total			247							\$958,558	

## SIB PLANT TABLE I, 1-2

## 2015 Service Line Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-7	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants										
	333	service lines	44	3/4" & 1"	Copper	\$3,881	Sycamore	12/2015	n/a	\$170,755	Replace 44 residential services (3/4" or 1") on Sycamore between Thistle and Ocotillo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1974 and will be 41 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-7 in Exhibit CC-1 for the locations of the replacements.
	333	service lines	13	3/4" & 1"	Copper	\$3,881	Winchester	12/2015	n/a	\$50,450	Replace 13 residential services (3/4" or 1") on Winchester between Sunburst and Palomino. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority due to their vicinity to the other projects being completed this year, and also because these services are in a very high pressure area (>120 psi), and are therefore more susceptible to failure. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-8 Exhibit CC-1 for the locations of the replacements.
S-8	333	service lines									

S-9	333	service lines	31	3/4" & 1"	Copper	\$3,881	Ridgeway	12/2015	n/a	\$120,305	Replace 31 residential services (3/4" or 1") on Ridgeway between Palisades and Winchester. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1976 and will be 39 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-9 Exhibit CC-1 for the locations of the replacements.
S-10	333	service lines	54	3/4" & 1"	Copper	\$3,881	Sunburst	12/2015	n/a	\$209,563	Replace 54 residential services (3/4" or 1") on Sunburst between Palisades and Sycamore. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority due to their vicinity to the other projects being completed this year, and also because these services are in a very high pressure area (>120 psi), and are therefore more susceptible to failure. Additionally, homes on this street a very large, and are therefore expected to use more water, which reduces meter accuracy faster. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-10 Exhibit CC-1 for the locations of the replacements.
S-11	333	service lines	28	3/4" & 1"	Copper	\$3,881	Burro	12/2015	n/a	\$108,662	Replace 28 residential services (3/4" or 1") on Burro between Palomino and Pinchushion. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1978 and will be 37 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-11 Exhibit CC-1 for the locations of the replacements.
S-12	333	service lines	26	3/4" & 1"	Copper	\$3,881	Greystone	12/2015	n/a	\$100,901	Replace 26 residential services (3/4" or 1") on Greystone between Sunburst and Sycamore. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are in the vicinity of the other service line replacements for 2015 and will be about 29 years old. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-12 Exhibit CC-1 for the locations of the replacements.



S-13	333	service lines	25	¾" & 1"	Copper	\$3,881	Telegraph	12/2015	n/a	\$97,020	Replace 25 residential services (¾" or 1") on Telegraph between Greystone and Sunburst. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are in the vicinity of the other service line replacements for 2015 and will be about 29 years old. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-13 Exhibit CC-1 for the locations of the replacements.
Total			221							\$857,656	

## SIB PLANT TABLE I, 1-3

## 2016 Service Line Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Act No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Act No)	Estimated Subtotal Cost (by project)	
S-14	333	service lines	95	3/4" & 1"	Copper	\$3,881	Cholla	12/2016	n/a	\$368,676	Replace 95 residential services (3/4" or 1") on Cholla between Chicory and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 43 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-14 Exhibit CC-1 for the locations of the replacements.
S-15	333	service lines	49	3/4" & 1"	Copper	\$3,881	Chicory	12/2016	n/a	\$190,159	Replace 49 residential services (3/4" or 1") on Chicory between Sycamore and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1974 and will be approximately 42 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-15 Exhibit CC-1 for the locations of the replacements.

S-16	333	service lines	26	¾" & 1"	Copper	\$3,881	Verbena	12/2016	n/a	\$100,901	Replace 26 residential services (¾" or 1") on Verbena between Sage and El Lago. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1978 and will be approximately 38 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-16 Exhibit CC-1 for the locations of the replacements.
S-17	333	service lines	56	¾" & 1"	Copper	\$3,881	El Lago	12/2016	n/a	\$217,325	Replace 56 residential services (¾" or 1") on El Lago between Palisades and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1979 and will be approximately 37 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-17 Exhibit CC-1 for the locations of the replacements.
S-18	333	service lines	30	¾" & 1"	Copper	\$3,881	Cavern	12/2016	n/a	\$116,424	Replace 30 residential services (¾" or 1") on Cavern between Palisades and El Lago. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1979 and will be approximately 37 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-18 in Exhibit CC-1 for the locations of the replacements.
<b>Total</b>			<b>256</b>							<b>\$993,485</b>	

**SIB PLANT TABLE I, 1-4****2017 Service Line Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Act No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Act No)	Estimated Subtotal Cost (by project)	
S-19	333	service lines	56	3/4" & 1"	Copper	\$3,881	Mimosa	12/2017	n/a	\$217,325	Replace 56 residential services (3/4" or 1") on Mimosa between Sunflower and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1975 and will be approximately 42 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-19 in Exhibit CC-1 for the locations of the replacements.
S-20	333	service lines	34	3/4" & 1"	Copper	\$3,881	Mountainside	12/2017	n/a	\$131,947	Replace 34 residential services (3/4" or 1") on Mountainside between Palisades and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1975 and will be 42 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-20 in Exhibit CC-1 for the locations of the replacements.

S-21	333	service lines	31	¾" & 1"	Copper	\$3,881	Echo Hill	12/2017	n/a	\$120,305	Replace 31 residential services (¾" or 1" on Echo Hill between El Lago and Mimosa. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1979 and will be 38 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-21 in Exhibit CC-1 for the locations of the replacements.
S-22	333	service lines	84	¾" & 1"	Copper	\$3,881	El Pueblo	12/2017	n/a	\$325,987	Replace 84 residential services (¾" or 1" on El Pueblo between Fountain Hills Blvd and Caliente. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1972 and will be 45 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-22 in Exhibit CC-1 for the locations of the replacements.
S-23	333	service lines	55	¾" & 1"	Copper	\$3,881	Oro Grande, Pampas	12/2017	n/a	\$213,444	Replace 55 residential services (¾" or 1" on Oro Grande and Pampas between Calle del Prado and Tejon. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1974 and will be approximately 43 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-23 in Exhibit CC-1 for the locations of the replacements.
<b>Total</b>			<b>260</b>							<b>\$1,009,008</b>	

## SIB PLANT TABLE I, 1-5

## 2018 Service Line Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-24	333	service lines	39	3/4" & 1"	Copper	\$3,881	Alamosa	12/2018	n/a	\$151,351	Replace 39 residential services (3/4" or 1") on Alamosa between El Pueblo and Del Cambré. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1972 and will be 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-24 in Exhibit CC-1 for the locations of the replacements.
S-25	333	service lines	41	3/4" & 1"	Copper	\$3,881	Caliente Bowstring	12/2018	n/a	\$159,113	Replace 41 residential services (3/4" or 1") on Caliente and Bowstring between Tejon and El Pueblo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-25 in Exhibit CC-1 for the locations of the replacements as well as the location of historical replacements in the area.

S-26	333	service lines	24	¾" & 1"	Copper	\$3,881	El Sobrante	12/2018	n/a	\$93,139	Replace 24 residential services (¾" or 1") on El Sobrante between Baca and Calvaras. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1972 and will be 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-26 in Exhibit CC-1 for the locations of the replacements.
S-27	333	service lines	22	¾" & 1"	Copper	\$3,881	Mirage Crossing	12/2018	n/a	\$85,378	Replace 22 residential services (¾" or 1") on Mirage Crossing between El Pueblo and Alamosa. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services will be 27 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-27 in Exhibit CC-1 for the locations of the replacements.
S-28	333	service lines	30	¾" & 1"	Copper	\$3,881	Calle Del Prado	12/2018	n/a	\$116,424	Replace 30 residential services (¾" or 1") on Calle Del Prado between El Pueblo and Del Cambre. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-28 in Exhibit CC-1 for the locations of the replacements.
S-29	333	service lines	39	¾" & 1"	Copper	\$3,881	Tejon, Buena Vida, Rica Vida, and Agave	12/2018	n/a	\$151,351	Replace 39 residential services (¾" or 1") on Tejon, Buena Vida, Rica Vida, and Agave between El Sobrante and El Pueblo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1977 and will be approximately 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-29 in Exhibit CC-1 for the locations of the replacements.

S-30	333	service lines	36	3/4" & 1"	Copper	\$3,881	Deerskin	12/2018	n/a	\$139,709	Replace 36 residential services (3/4" or 1") on Deerskin between Alamosa and Del Cambre. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-30 for the locations of the replacements.
Total			231							\$896,465	



## SIB PLANT TABLE I, 2-1

## 2014 Valve Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-1	331	gate valves	28	23-6" 1-8" 4-12"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201 12"-\$6,173	Palomino	12/2014	n/a	\$136,862	Replace 23-6", 1-8", 4-12" valves (28 total) on Palomino between Palisades and Fountain Hills Blvd. Distribution system valves that are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-1 in Exhibit CC-1 shows the location of these valves.
V-2	331	gate valves	34	31-6" 1-4" 2-12"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 12"-\$6,173	Mustang	12/2014	n/a	\$160,952	Replace 31-6", 1-4", and 2-12" valves (34 total) on Mustang between Palisades and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1977 and will be 37 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-2 in Exhibit CC-1 shows the location of these valves.

V-3	331	gate valves	1	6"	cast iron with rubberized epoxy coating	\$4,651	Spotted Horse	12/2014	n/a	\$4,651	Replace 1-6" valve on Spotted Horse between Mustang and Westridge. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. This valve is a priority because it was installed in 1979 and will be 35 years and is needed in order to operate the only hydrants on this street. Replacing valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-3 in Exhibit CC-1 shows the location of this valve.
V-4	331	gate valves	10	6"	cast iron with rubberized epoxy coating	\$4,651	Buffalo	12/2014	n/a	\$46,508	Replace 10-6" valves on Buffalo between Mustang and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-4 in Exhibit CC-1 shows the location of these valves.
V-5	331	gate valves	1	6"	cast iron with rubberized epoxy coating	\$4,651	Garland	12/2014	n/a	\$4,651	Replace 1-6" valve on Garland between Buffalo and Palatial. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. This valve is suffering from corrosion and is the only way to isolate Garland Circle. Replacing valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-5 in Exhibit CC-1 shows the location of this valve.
V-6	331	gate valves	10	6"	cast iron with rubberized epoxy coating	\$4,651	Pinto	12/2014	n/a	\$46,508	Replace 10-6" valves on Pinto between Palomino and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-6 in Exhibit CC-1 shows the location of these valves.

V-7	331	gate valves	11	6-6" 4-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"- \$5,201	Ocotillo	12/2014	n/a	\$53,359	Replace 6-6" and 4-8" valves (10 total) on Ocotillo between Mustang and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1974 and will be 40 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-7 in Exhibit CC-1 shows the location of these valves.
Total			95							\$453,491	

**SIB PLANT TABLE I, 2-2****2015 Valve Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-8	331	gate valves	14	1-4" 9-6" 4-12"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 12"-\$6,173	Sycamore	12/2015	n/a	\$70,981	Replace 1-4", 9-6", 4-12" valves (14 total) on Sycamore between Thistle and Ocotillo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-8 in Exhibit CC-1 shows the location of these valves.
V-9	331	gate valves	6	6"	cast iron with rubberized epoxy coating	\$4,651	Winchester	12/2015	n/a	\$27,905	Replace 6-6" valves on Winchester between Sunburst and Palomino. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be 17-39 years old and are located in a high pressure area. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-9 in Exhibit CC-1 shows the location of these valves.

V-10	331	gate valves	9	6"	cast iron with rubberized epoxy coating	\$4,651	Ridgeway	12/2015	n/a	\$41,857	Replace 9-6" valves on Ridgeway between Palisades and Winchester. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-10 in Exhibit CC-1 shows the location of these valves.
V-11	331	gate valves	18	6"	cast iron with rubberized epoxy coating	\$4,651	Sunburst	12/2015	n/a	\$83,714	Replace 18-6" valves on Sunburst between Palisades and Sycamore. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 17-29 years old and are located in a high pressure area. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-11 in Exhibit CC-1 shows the location of these valves.
V-12	331	gate valves	15	6"	cast iron with rubberized epoxy coating	\$4,651	Greystone	12/2015	n/a	\$69,762	Replace 15-6" valve on Greystone between Sunburst and Sycamore. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-12 in Exhibit CC-1 shows the location of these valves.
V-13	331	gate valves	8	6"	cast iron with rubberized epoxy coating	\$4,651	Telegraph	12/2015	n/a	\$37,206	Replace 8-6" valves on Telegraph between Greystone and Sunburst. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-13 in Exhibit CC-1 shows the location of these valves.
V-14	331	gate valves	4	6"	cast iron with rubberized epoxy coating	\$4,651	Tacony	12/2015	n/a	\$18,603	Replace 4-6" valves on Tacony between Greystone and Telegraph. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main break. The valve replacements are not related to new growth. Map V-14 in Exhibit CC-1 shows the location of these valves.

V-15	331	gate valves	11	5-6" 1-8" 5-12"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201 12"-\$6,173	Mimosa	12/2015	n/a	\$59,321	Replace 5-6", 1-8", and 5-12" (11 total) valves on Mimosa between Sunflower and Thistle. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1976 and will be 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-15 in Exhibit CC-1 shows the location of these valves.
V-16	331	gate valves	18	1-4" 13-6" 4-8"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 8"-\$5,201	Cholla	12/2015	n/a	\$85,694	Replace 1-4", 13-6", and 4-8" (18 total) valves on Cholla between Chicory and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1975 and will be approximately 40 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-16 in Exhibit CC-1 shows the location of these valves.
Total			103							\$495,043	

**SIB PLANT TABLE I, 2-3****2016 Valve Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-17	331	gate valves	8	5-6" 3-12"	cast iron with rubberized epoxy coating	6"-\$4,651 12"-\$6,173	Chicory	12/2016	n/a	\$41,744	Replace 5-6" and 3-12" (8 total) valves on Chicory between Sycamore and Thistle. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1974 and will be 42 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-17 in Exhibit CC-1 shows the location of these valves.
V-18	331	gate valves	6	5-6" 1-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201	Verbena	12/2016	n/a	\$28,433	Replace 5-6" and 1-8" (6 total) valves on Verbena between Sage and El Lago. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1977 and will be approximately 39 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-18 in Exhibit CC-1 shows the location of these valves.

V-19	331	gate valves	12	9-6" 3-12"	cast iron with rubberized epoxy coating	6"-\$4,651 12"-\$6,173	Sage	12/2016	n/a	\$60,377	Replace 9-6" and 3-12" (12 total) valves on Sage between Palisades and Stardust. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1989 and will be approximately 27 to 41 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-19 in Exhibit CC-1 shows the location of these valves.
V-20	331	gate valves	6	3-6" 3-12"	cast iron with rubberized epoxy coating	6"-\$4,651 12"-\$6,173	Ironwood	12/2016	n/a	\$32,472	Replace 3-6" and 3-12" (6 total) valves on Ironwood between Thistle and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These were installed in 1973 and will be 43 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-20 in Exhibit CC-1 shows the location of these valves.
V-21	331	gate valves	19	1-4" 11-6" 5-8" 2-12"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 8"-\$5,201 12"-\$6,173	Thistle	12/2016	n/a	\$93,940	Replace 1-4", 11-6", 5-8", and 2-12" (19 total) valves on Thistle between Palisades and Mountainside Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 40 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-21 in Exhibit CC-1 shows the location of these valves.
V-22	331	gate valves	21	10-6" 11-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201	El Lago	12/2016	n/a	\$103,717	Replace 10-6" and 11-8" (21 total) valves on El Lago between Palisades and Fountain Hills Blvd Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1979 and will be approximately 37 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-22 in Exhibit CC-1 shows the location of these valves.



V-23	331	gate valves	16	13-6" 3-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"- \$5,201	Sunflower	12/2016	n/a	\$76,063	Replace 13-6" and 3-8" (16 total) valves on Sunflower between Cactus and Mountainside. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1995 and will be approximately 21 to 41 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-23 in Exhibit CC-1 shows the location of these valves.
<b>Total</b>			<b>88</b>							<b>\$436,776</b>	

**SIB PLANT TABLE I, 2-4****2017 Valve Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Act No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-24	331	gate valves	8	6"	cast iron with rubberized epoxy coating	\$4,651	Cavern	12/2017	n/a	\$37,206	Replace 8-6" valves on Cavern between Palisades and El Lago. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-24 in Exhibit CC-1 shows the location of these valves.
V-25	331	gate valves	7	4-6" 3-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201	Jackrabbit	12/2017	n/a	\$34,206	Replace 4-6" and 3-8" (7 total) valves on Jackrabbit between Palisades and Sunflower. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1997. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-25 in Exhibit CC-1 shows the location of these valves.

V-26	331	gate valves	16	9-6" 4-8" 3-12"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201 12"-\$6,173	Mountain- side	12/2017	n/a	\$81,180	Replace 9-6", 4-8", and 3-12" (16 total) valves on Mountainside between Palisades and Thistle Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1978 and will be 39 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-26 in Exhibit CC-1 shows the location of these valves.
V-27	331	gate valves	6	4-6" 2-8"	cast iron with rubberized epoxy coating	6"-\$4,651 8"-\$5,201	Echo Hill	12/2017	n/a	\$29,005	Replace 4-6" and 2-8" (6 total) valves on Echo Hill between El Lago and Mimosa. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-27 in Exhibit CC-1 shows the location of these valves.
V-28	331	gate valves	14	6"	cast iron with rubberized epoxy coating	\$4,651	Tumble- weed	12/2017	n/a	\$65,111	Replace 14-6" valves on Tumbleweed between Cavern and Mountainside. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1990 and will be 27 to 42 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-28 in Exhibit CC-1 shows the location of these valves.
V-29	331	gate valves	14	6"	cast iron with rubberized epoxy coating	\$4,651	Ponderosa	12/2017	n/a	\$65,111	Replace 14-6" valves on Ponderosa between Primrose and Mountainside Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1989 and will be 28 to 42 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-29 in Exhibit CC-1 shows the location of these valves.

V-30	331	gate valves	9	6"	cast iron with rubberized epoxy coating	\$4,651	Lantana, Jericho, Brodiea	12/2017	n/a	\$41,857	Replace 9-6" valves on Lantana, Jericho, and Brodiea between El Lago and Mimosa. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-30 in Exhibit CC-1 shows the location of these valves.
<b>Total</b>			<b>74</b>							<b>\$353,676</b>	

**SIB PLANT TABLE I, 2-5****2018 Valve Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)				Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (Estimated)	Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-31	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	gate valves	33	1-4" 19-6" 5-8" 8-12"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 8"-\$5,201 12"-\$6,173	12/2018	n/a	\$168,186	Replace 1-4", 19-6", 5-8", 8-12" (33 total) valves on El Pueblo between Fountain Hills Blvd and Escalante. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1973 and will be 45 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-31 in Exhibit CC-1 shows the location of these valves.
V-32	331	gate valves	13	1-4" 12-6"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651	12/2018	n/a	\$60,240	Replace 1-4" and 12-6" (13 total) valves on Oro Grande between Calle del Prado and Tejon. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1974 and will be 44 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-32 in Exhibit CC-1 shows the location of these valves.

V-33	331	gate valves	16	1-4" 14-6" 1-12"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651 12"-\$6,173	Alamosa	12/2018	n/a	\$75,715	Replace 1-4", 14-6", and 1-12" (16 total) valves on Alamosa between Del Cambre and El Pueblo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1972 and will be 46 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-33 in Exhibit CC-1 shows the location of these valves.
V-34	331	gate valves	11	2-4" 9-6"	cast iron with rubberized epoxy coating	4"-\$4,431 6"-\$4,651	Caliente, Yuma Kiva	12/2018	n/a	\$50,719	Replace 2-4" and 9-6" (11 total) valves on Caliente and Yuma Kiva between Tejon and El Pueblo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1973 and will be 45 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-34 in Exhibit CC-1 shows the location of these valves.
V-35	331	gate valves	16	15-6" 1-12"	cast iron with rubberized epoxy coating	6"-\$4,651 12"-\$6,173	El Sobrante	12/2018	n/a	\$75,935	Replace 15-6" and 1-12" (16 total) valves on El Sobrante between Baca and Calvaras. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1972 and will be 6 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-35 in Exhibit CC-1 shows the location of these valves.
<b>Total</b>			<b>89</b>							<b>\$430,795</b>	

## SIB PLANT TABLE I, 3-1

## 2014 Hydrant Replacements

## Information to be included with DSIC-Eligible Project Notification

Project No.	NARUC Act No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Act No)	Estimated Subtotal Cost (by project)	
H-1	335 Hydrants	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Palomino	12/2014	n/a	\$18,093	Replace 8 fire hydrants on Palomino between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are approximately 35 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Three hydrants on this street have already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-1 in Exhibit CC-1 which shows the locations of the future replacements.
H-2	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Mustang	12/2014	n/a	\$22,616	Replace 10 fire hydrants on Mustang between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are 37 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-2 in Exhibit CC-1 which shows the locations of the future replacements.

H-3	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Spotted Horse	12/2014	n/a	\$2,262	Replace 1 fire hydrant on Spotted Horse between Mustang and Westridge. The fire hydrant is in deteriorating condition and is 34 years old. This is a Dresser hydrant, for which we can no longer obtain repair parts. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-3 in Exhibit CC-1 which shows the location of the future replacement.
H-4	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Buffalo	12/2014	n/a	\$2,262	Replace 1 fire hydrant on Buffalo between Mustang and Puma. The fire hydrant is in deteriorating condition and is 37 years old. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other 3 hydrants on this street have already needed replacement. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-4 in Exhibit CC-1 which shows the location of the future replacement.
H-5	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Sunburst	12/2014	n/a	\$22,616	Replace 10 fire hydrants on Sunburst between Palisades and Sycamore. The fire hydrants are in deteriorating condition and 2 hydrants on this street have already needed replacement. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants on this street have already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-5 in Exhibit CC-1 which shows the locations of the future replacements.
H-6	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Burro, Pincushion	12/2014	n/a	\$9,046	Replace 4 fire hydrants on Burro and Pincushion between Palomino and Ocotillo. The fire hydrants are in deteriorating condition and are approximately 37 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-6 in Exhibit CC-1 which shows the locations of the future replacements.
II-7	335	hydrants	7	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Ocotillo	12/2014	n/a	\$15,831	Replace 7 fire hydrants on Ocotillo between Mustang and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are approximately 39 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-7 in Exhibit CC-1 which shows the locations of the future replacements.
<b>Total</b>			<b>41</b>							<b>\$92,726</b>	



**SIB PLANT TABLE I, 3-2****2015 Hydrant Replacements****Information to be included with DSIC-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-8	309 Supply Mains										Replace 6 fire hydrants on Sycamore between Thistle and Ocotillo. The fire hydrants are in deteriorating condition and will be 41 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-8 in Exhibit CC-1 which shows the locations of the future replacements.
	331 T&D Mains										
	333 Services										
H-9	334 Meters										Replace 6 fire hydrants on Ridgeway between Palisades and Winchester. The fire hydrant is in deteriorating condition and will be 39 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-9 in Exhibit CC-1 which shows the locations of the future replacements.
	335 Hydrants										

H-10	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Greystone	12/2014	n/a	\$13,570	Replace 6 fire hydrants on Greystone between Sunburst and Sycamore. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-10 in Exhibit CC-1 which shows the location of the future replacements.
H-11	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Telegraph	12/2014	n/a	\$9,046	Replace 4 fire hydrants on Telegraph between Greystone and Sunburst. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-11 in Exhibit CC-1 which shows the location of the future replacements.
H-12	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Taony	12/2015	n/a	\$2,262	Replace 1 fire hydrant on Taony between Greystone and Telegraph. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other hydrant on this street has already needed replacement. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-12 in Exhibit CC-1 which shows the locations of the future replacement.
H-13	335	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Mimosa	12/2015	n/a	\$18,093	Replace 8 fire hydrants on Mimosa between Sunflower and Thistle. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-13 in Exhibit CC-1 which shows the locations of the future replacements.

H-14	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Cholla	12/2015	n/a	\$9,046	<p>Replace 4 fire hydrants on Cholla between Chicory and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be 42 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants on this street have already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-14 in Exhibit CC-1 which shows the locations of the future replacements.</p>
Total			35							\$79,157	

**SIB PLANT TABLE I, 3-3****2016 Hydrant Replacements****Information to be included with DSIC-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-15	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	hydrants	2	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Chicory	12/2016	n/a	\$4,523	Replace 2 fire hydrants on Chicory between Sycamore and Thistle. The fire hydrants are in deteriorating condition and will be 41 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-15 in Exhibit CC-1 which shows the locations of the future replacements.
H-16	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Verbena	12/2016	n/a	\$6,785	Replace 3 fire hydrants on Verbena between Sage and El Lago. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-16 in Exhibit CC-1 which shows the locations of the future replacements.

H-17	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Sage, Stardust	12/2016	n/a	\$11,308	Replace 5 fire hydrants on Sage and Stardust between Palisades and Greystone. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-17 in Exhibit CC-1 which shows the locations of the future replacements.
H-18	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Sierra Norte	12/2016	n/a	\$2,262	Replace 1 fire hydrant on Sierra Norte between Palisades and Sage. This is a Dresser hydrant, for which we can no longer obtain repair parts. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-18 in Exhibit CC-1 which shows the location of the future replacement.
H-19	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Ironwood	12/2016	n/a	\$6,785	Replace 3 fire hydrants on Ironwood between Thistle and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be 43 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-19 in Exhibit CC-1 which shows the location of the future replacements.
H-20	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Thistle	12/2016	n/a	\$11,308	Replace 5 fire hydrants on Thistle between Palisades and Mountanside. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-20 in Exhibit CC-1 which shows the locations of the future replacements.
H-21	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	El Lago	12/2016	n/a	\$22,616	Replace 10 fire hydrants on El Lago between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-21 in Exhibit CC-1 which shows the locations of the future replacements.

H-22	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Cavern	12/2016	n/a	\$2,262	Replace 1 fire hydrant on Cavern between Palisades and El Lago. The fire hydrant is in deteriorating condition and will be 36 years old in 2016. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other hydrant on this street already needed replacement. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-22 in Exhibit CC-1 which shows the location of the future replacement.
H-23	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Mountain-side	12/2016	n/a	\$9,046	Replace 4 fire hydrants on Mountainside between Palisades and Thistle. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-23 in Exhibit CC-1 which shows the locations of the future replacements.
H-24	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Echo Hill	12/2016	n/a	\$6,785	Replace 3 fire hydrants on Echo Hill between El Lago and Mimosa. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-24 in Exhibit CC-1 which shows the locations of the future replacements.
<b>Total</b>			<b>37</b>							<b>\$83,680</b>	

Chaparral City Water Company – PWS ID No. 07-017  
**SIB PLANT TABLE I, 3-4**  
 2017 Hydrant Replacements

**Information to be included with DSIC-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-25	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	hydrants	7	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Tumbleweed, Seminole	12/2017	n/a	\$15,831	Replace 7 fire hydrants on Tumbleweed and Seminole between Cavern and Mountainside. The fire hydrants are in deteriorating condition and will be about 40 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-25 in Exhibit CC-1 which shows the locations of the future replacements.
H-26	335	hydrants	9	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Sunflower, Primrose	12/2017	n/a	\$20,354	Replace 9 fire hydrants on Sunflower and Primrose between Cactus and Mountainside. The fire hydrants are in deteriorating condition and will be about 40 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-26 in Exhibit CC-1 which shows the locations of the future replacements.

H-27	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Ponderosa	12/2017	n/a	\$9,046	Replace 4 fire hydrants on Ponderosa between Primrose and Mountainside. The fire hydrants are in deteriorating condition and will be about 31 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-27 in Exhibit CC-1 which shows the locations of the future replacements.
H-28	335	hydrants	11	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	El Pueblo	12/2017	n/a	\$24,878	Replace 11 fire hydrants on El Pueblo between Fountain Hills Blvd and Escalante. The fire hydrants are in deteriorating condition and will be about 42 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-28 in Exhibit CC-1 which shows the locations of the future replacements.
H-29	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Oro Grande	12/2017	n/a	\$13,570	Replace 6 fire hydrants on Ironwood between Calle del Prado and Tejon. The fire hydrants are in deteriorating condition and will be 44 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-29 in Exhibit CC-1 which shows the location of the future replacements.
<b>Total</b>			<b>37</b>							<b>\$83,679</b>	



## SIB PLANT TABLE I, 3-5

## 2018 Hydrant Replacements

## Information to be included with DSIC-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-30	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Alamosa	12/2018	n/a	\$18,093	Replace 8 fire hydrants on Alamosa between Del Cumbre and El Pueblo. The fire hydrants are in deteriorating condition and will be about 46 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-30 in Exhibit CC-1 which shows the locations of the future replacements.
H-31	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Caliente, Tejon	12/2018	n/a	\$9,046	Replace 4 fire hydrants on Caliente and Tejon between El Sobrante and El Pueblo. The fire hydrants are in deteriorating condition and will be about 45 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants on this street have already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-31 in Exhibit CC-1 which shows the locations of the future replacements.

H-32	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	El Sobrante	12/2018	n/a	\$13,570	Replace 6 fire hydrants on El Sobrante between Baca and Calvaras. The fire hydrants are in deteriorating condition and will be about 46 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-32 in Exhibit CC-1 which shows the locations of the future replacements.
H-33	335	hydrants	13	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Palisades	12/2018	n/a	\$29,401	Replace 13 fire hydrants on Palisades between Sage and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be about 40 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Three hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-33 in Exhibit CC-1 which shows the locations of the future replacements.
H-34	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	\$2,262	Fountain Hills Blvd.	12/2018	n/a	\$11,308	Replace 5 fire hydrants on Fountain Hills Blvd between Palomino and Inca. The fire hydrants are in deteriorating condition and will be 41 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-34 in Exhibit CC-1 which shows the location of the future replacements.
<b>Total</b>			<b>36</b>							<b>\$81,418</b>	

## SIB PLANT TABLE I, 4-1

## 2014 Meter Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-1	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants										
	334	meters	1,507	¾" to >2"	Copper/ Plastic	¾"- \$195 1"- \$234 1½"- \$367 2"- \$447 >2"- \$1,223	Meter Routes 8, 9, and 87 (see map M-1 in Exhibit CC-1)	12/2014	n/a	\$314,989	
Total			1,507							\$314,989	Replace 1,134 - ¾", 348 - 1", 16 - 1.5", 6 - 2", and 3 - >2" (1,507 total) meters in CCWC meter routes 8, 9, and 87. The existing meters are between 10 and 15 years old and are experiencing a rapid decline in meter accuracy. Route 8 was chosen for completion in 2014 because the meters are the oldest in the system. Routes 9 and 87 were chosen to complete in the same year due to their vicinity to Route 8. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-1 in Exhibit CC-1 for the location of the meter routes.

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility  2. Provide narrative explaining why this segment of plant is a priority.  3. Provide narrative explaining how replacing this plant will benefit existing customers.  4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers.  5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-2	309 Supply Mains  331 T&D Mains  333 Services  334 Meters  335 Hydrants	meters	1,357	¾" to >2"	Cooper/ Plastic	¾"- \$195 1"- \$234 1½"- \$367 2"- \$447 >2"- \$1,223	12/2015	n/a	\$317,509	Replace 141 - ¾", 1192 - 1", 10 - 1.5", 13 - 2", and 1 - >2" (1,357 total) meters in CCWC meter routes 63 and 98. The existing meters are about 13 years old, and will be 15 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-2 in Exhibit CC-1 for the location of the meter routes.	
	Total		1,357						\$317,509		

## SIB PLANT TABLE I, 4-3

## 2016 Meter Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-3	334	meters	1,327	3/4" to 2"	Copper/ Plastic	3/4"- \$195 1"- \$234 1 1/2"- \$367 2"- \$447	Meter Routes 10, 23, 36, and 68 (see map M-3 in Exhibit CC-1)	12/2016	n/a	\$277,493	Replace 1022 - 3/4", 267 - 1", 24 - 1.5", and 14 - 2" (1,327 total) meters in CCWC meter routes 10, 23, 36, and 68. The existing meters are about 12-13 years old, and will be 15-16 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-3 in Exhibit CC-1 for the location of the meter routes.
<b>Total</b>			<b>1,327</b>							<b>\$277,493</b>	

**SIB PLANT TABLE I, 4-4****2017 Meter Replacements****Information to be included with SIB-Eligible Project Notification**

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-4	334	330 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	1,588	3/4" to >2"	Copper/ Plastic	3/4"-\$195 1"-\$234 1 1/2"-\$367 2"-\$447 >2"-\$1,223	Meter Routes 3, 4, 17, and 31 (see map M-4 in Exhibit CC-1)	12/2017	n/a	\$328,953	Replace 1,335 - 3/4", 215 - 1", 13 - 1.5", 23 - 2", and 2 - >2" (1,588 total) meters in CCWC meter routes 3, 4, 17, and 31. The existing meters are about 11-12 years old, and will be 15-16 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-4 in Exhibit CC-1 for the location of the meter routes.
<b>Total</b>			<b>1,588</b>							<b>\$328,953</b>	

## SIB PLANT TABLE I, 4-5

## 2018 Meter Replacements

## Information to be included with SIB-Eligible Project Notification

Project No.	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)				Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
		Description	Pipe length/Quantity	Diameter/Size	Material	Installed Cost/Unit (estimated)	Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-5	334	meters	1,418	3/4" to >2"	Copper/ Plastic	3/4"-\$195 1"-\$234 1 1/2"-\$367 2"-\$447 >2"-\$1,223	Meter Routes 12, 13, 20, 44, and 96 (see map M-4 in Exhibit CC-1)	n/a	\$306,835	Replace 930 - 3/4", 448 - 1", 22 - 1 1/2", 13 - 2", and 5 - >2" (1,418 total) meters in CCWC meter routes 12, 13, 20, 44, and 96. The existing meters are about 11-12 years old, and will be 16-17 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-5 in Exhibit CC-1 for the location of the meter routes.
<b>Total</b>			<b>1,418</b>						<b>\$306,835</b>	

## Information to be included with SIB-Eligible Completed Project Filings

Revised 4/1/2014



[illegible]











## Information to be included with SIB-Eligible Completed Project Filings

[illegible]





## Information to be included with SIB-Eligible Completed Project Filings

[illegible]

SIB PLANT TABLE II- SUMMARY (Page 6)

Information to be included with SIB-Eligible Completed Project Filings

[illegible]<sup>1</sup> Total SIB Allowed Cost to be used in calculating the SIB Revenue Requirement

Check if  
☐ Consolidated

LINE

NO. CALCULATION OF OVERALL SIB REVENUE REQUIREMENT AND EFFICIENCY CREDIT

1	Total Authorized Revenue Requirement , Per Decision 74568, See Attached Schedules	\$ 11,069,078
2	SIB Revenue Cap percentage	5% Per Year
3	SIB Revenue Cap	\$ 553,454
4	SIB Allowed Cost (Per SIB Table II, Summary page, Column 2)	TBD
5	Total Revenue Requirement, (with pro forma SIB investments). See attached revenue requirements schedules as provided by Company.	TBD
6	SIB Revenue Requirement (line 5 minus line 1)	TBD
7	SIB Revenue Requirement Efficiency Credit	5%
8	SIB True-Up Adjustment (from SIB Schedule B)	TBD
9	SIB Authorized Revenue (line 6 plus line 7 plus line 8)	TBD

\* Number of Equivalent Meters, below

TBD

\* Charge per 5/8" meter

TBD

	No. of Customers at Year End	Multipliers	5/8 x 3/4-inch Equivalent Meters	Fixed Surcharge	Annual Rev by Meter Size
5/8 x 3/4-inch	TBD	1	TBD	TBD	TBD
3/4-inch	TBD	1.5	TBD	TBD	TBD
1-inch	TBD	2.5	TBD	TBD	TBD
1 1/2-inch	TBD	5	TBD	TBD	TBD
2-inch	TBD	8	TBD	TBD	TBD
3-inch	TBD	16	TBD	TBD	TBD
4-inch	TBD	25	TBD	TBD	TBD
6-inch	TBD	50	TBD	TBD	TBD
8-inch	TBD	80	TBD	TBD	TBD
10-inch	TBD	115	TBD	TBD	TBD
Totals	TBD		TBD		TBD

EPCOR WATER

SIB Schedule B

Chaparral City Water Company PWS ID No. 07-017

Decision No. 74568

Effective Date June 23, 2015

CALCULATION OF SIB TRUE-UP REVENUE REQUIREMENTS ADJUSTMENT	SIB Filing Sequence				
	SIB year 1*	SIB year 2	SIB year 3	SIB year 4	SIB year 5
SIB Authorized Revenue , Per SIB Schedule A	TBD	TBD	TBD	TBD	TBD
Total SIB Surcharges collections for Period	TBD	TBD	TBD	TBD	TBD
SIB True-Up Adjustment	TBD	TBD	TBD	TBD	TBD

Note: The Company shall also provide an analysis of cumulative over or under collections and a net amount to be included in the SIB True-up Adjustment

\*SIB year 1 is one year after effective date

TYPICAL BILL IMPACTS  
5/8-Inch Customers

Gallons	Per Dec. No. 74568 (no SIB Surcharge)	Step 1				Step 2				Step 3				Step 4				Step 5							
		Total Bill w/ SIB Year 1 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 2 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 3 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 4 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 5 *	SIB Inc.	Cumulative % Increase	commodity charge	per 1000	acc	tax (9.04%)					
0	\$ 21.94	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	0	20	20.12	21.93885				
1000	\$ 24.56	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	2.4	22.4	22.52	24.55861				
2000	\$ 27.17	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	4.8	24.8	24.92	27.17277				
3000	\$ 29.79	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	7.2	27.2	27.32	29.78973				
4000	\$ 37.51	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	14.28	34.28	34.4	37.50976				
5000	\$ 41.40	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	17.85	37.85	37.97	41.40249				
6000	\$ 45.30	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	21.42	41.42	41.54	45.29522				
7000	\$ 49.19	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	24.99	44.99	45.11	49.18794				
8000	\$ 53.08	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	28.56	48.56	48.68	53.08067				
9000	\$ 56.97	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	32.13	52.13	52.25	56.9734				
10000	\$ 70.13	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	44.2	64.2	64.32	70.13453				
11000	\$ 74.95	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	48.62	68.62	68.74	74.9541				
12000	\$ 79.77	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	53.04	73.04	73.16	79.77366				
13000	\$ 84.59	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	57.46	77.46	77.58	84.59323				
14000	\$ 89.41	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	61.88	81.88	82	89.4128				
15000	\$ 94.23	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	66.3	86.3	86.42	94.23237				
20000	\$ 118.33	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	88.4	108.4	108.52	118.3302				
25000	\$ 142.43	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	20	110.5	130.5	130.62	142.428				
Median (Cite Usage)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Mean (Cite Usage)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

\*. Bills in Years 1 -5 are net of  
Efficiency Credit

EPCOR WATER

Chaparral City Water Company PWS ID No. 07-017

Decision No. 74568

Effective Date June 23, 2015

SIB Schedule D

EARNINGS TEST

	SIB Step 1	SIB Step 2	SIB Step 3	SIB Step 4	SIB Step 5	Total Pro-forma with SIB
Per Dec. No 74568						
Total Operating Revenue *	TBD	TBD	TBD	TBD	TBD	TBD
Operating Expenses	TBD	TBD	TBD	TBD	TBD	TBD
Operations & Maintenance	TBD	TBD	TBD	TBD	TBD	TBD
Depreciation & Amortization	TBD	TBD	TBD	TBD	TBD	TBD
Taxes Other than Income	TBD	TBD	TBD	TBD	TBD	TBD
Income Taxes	TBD	TBD	TBD	TBD	TBD	TBD
Total Operating Expenses	TBD	TBD	TBD	TBD	TBD	TBD
Operating Income	TBD	TBD	TBD	TBD	TBD	TBD
Rate Base	TBD	TBD	TBD	TBD	TBD	TBD
Rate of Return on Rate Base	8.95%	TBD	TBD	TBD	TBD	TBD
Authorized Rate of Return on Rate Base	8.95%	TBD	TBD	TBD	TBD	TBD

\*: SIB Revenues in Years 1 -5 are net of 5% Efficiency Credit